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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/562,550

12/29/2005

Yoshinobu Watanabe

10873.1845USWO

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53148

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EXAMINER

LEACH, CRYSTAL I

ART UNIT

PAPER NUMBER

3737

MAIL DATE

DELIVERY MODE

10/02/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/562,550	Applicant(s) WATANABE ET AL.	
	Examiner CRYSTAL I. LEACH	Art Unit 3737	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 December 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>12/29/2005</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Examiner notes that claims 1 and 11 invoke 35 U.S.C. 112, sixth paragraph.

Information Disclosure Statement

1. The Information Disclosure Statements (IDS) submitted on December 29, 2005 is in compliance with 37 CFR 1.97 and 1.98. The references therein have been considered.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-8 and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Sunagawa et al. (US 2003/0009101).

4. Regarding claims 1-8 and 13, Sunagawa et al. teach an ultrasonic diagnostic apparatus (see abstract), comprising: transmission means (2) and (14) for transmitting at least one ultrasonic signal from a surface of a skin of a subject toward a blood vessel of the subject (see para. [0010]-[0011] and [0034]); reception means (2) for receiving an ultrasonic echo reflected by the blood vessel and converting the ultrasonic echo into an electric signal to obtain the ultrasonic echo signal in a depth direction from the surface of the skin (see para. [0010]-[0011] and [0034]); movement detection means for analyzing a phase of the ultrasonic echo signal in a direction traversing the blood vessel to calculate a movement amount in each of a plurality of regions including

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a blood vessel wall composing the blood vessel and a vicinity of the blood vessel wall (see para. [0012]-[0015]); analysis means (8) for analyzing a state of the blood vessel based on a variation in the calculated movement amount in each of the regions (see para. [0011], [0020]); boundary position detection means for detecting a boundary position between a blood flow region and the blood vessel wall of the blood vessel based on a result of the analysis by the analysis means ("B-mode imaging" capabilities enable detection of blood vessel wall boundary, see para. [0003]); and stability judgment means for comparing the boundary position detected by the boundary position detection means with a detection result in a previous cycle (see para. [0035]). See also fig. 1-8 and para. [0084]. Sunagawa et al. teach a display means (13) capable of displaying data received from analyzing/judgment section (see fig. 1).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sunagawa et al. (US 2003/0009101) in view of Fritz et al. (US 2003/0199762).

Sunagawa et al. do not explicitly teach an IMT calculation means.

In a similar field of endeavor, Fritz et al. teach an IMT calculation means (see para. [0039]).

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It would have been obvious to one of ordinary skill in the art at the time of the invention to include an IMT calculation means in the invention of Sunagawa et al., in light of the teachings of Fritz et al., in order to improve movement measurements of the arterial wall.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Kanai et al. (US 2004/0260180) teach a tissue identifying method in ultrasonography and ultrasonograph; Chubachi et al. (5,840,028) teach ultrasonic diagnostic equipment.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CRYSTAL I. LEACH whose telephone number is (571)272-5211. The examiner can normally be reached on Monday through Friday, 8 am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Casler can be reached on 571-272-4956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/BRIAN CASLER/
Supervisory Patent Examiner, Art
Unit 3737

/Crystal I Leach/
Examiner, Art Unit 3737